

Machine Disassembly and Replacement

This chapter contains step-by-step procedures on how to disassemble the notebook computer for maintenance and troubleshooting.

To disassemble the computer, you need the following tools:

- ☐ Wrist grounding strap and conductive mat for preventing electrostatic discharge
- ☐ Plastic flat head screw driver
- ☐ Plastic tweezers
- ☐ Philips screw driver
- ☐ Any plastic tool can take off the middle cover

NOTE: The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatch when putting back the components. When you remove the stripe cover, please be careful not to scrape the cover.

General Information

Before You Begin

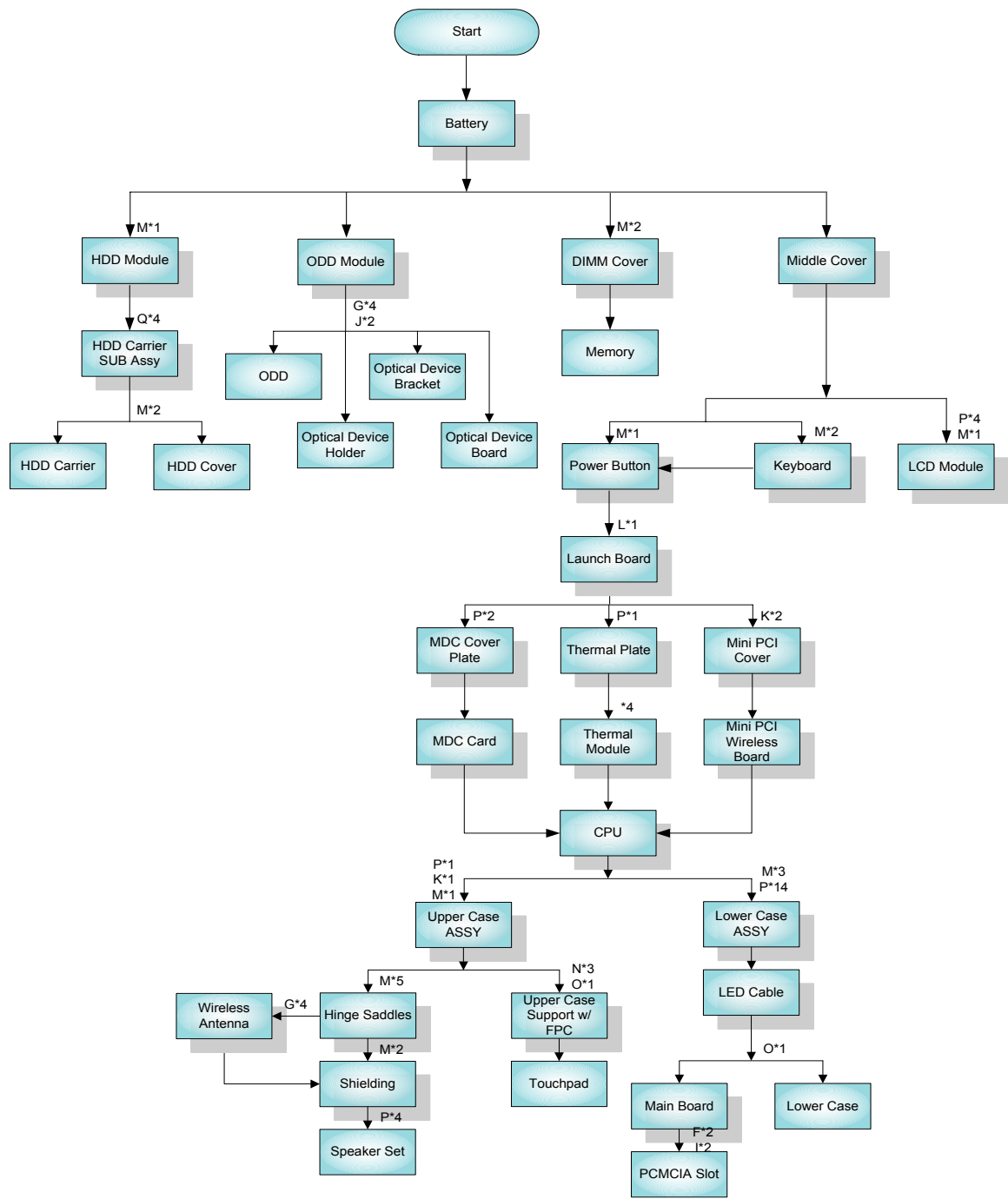
Before proceeding with the disassembly procedure, make sure that you do the following:

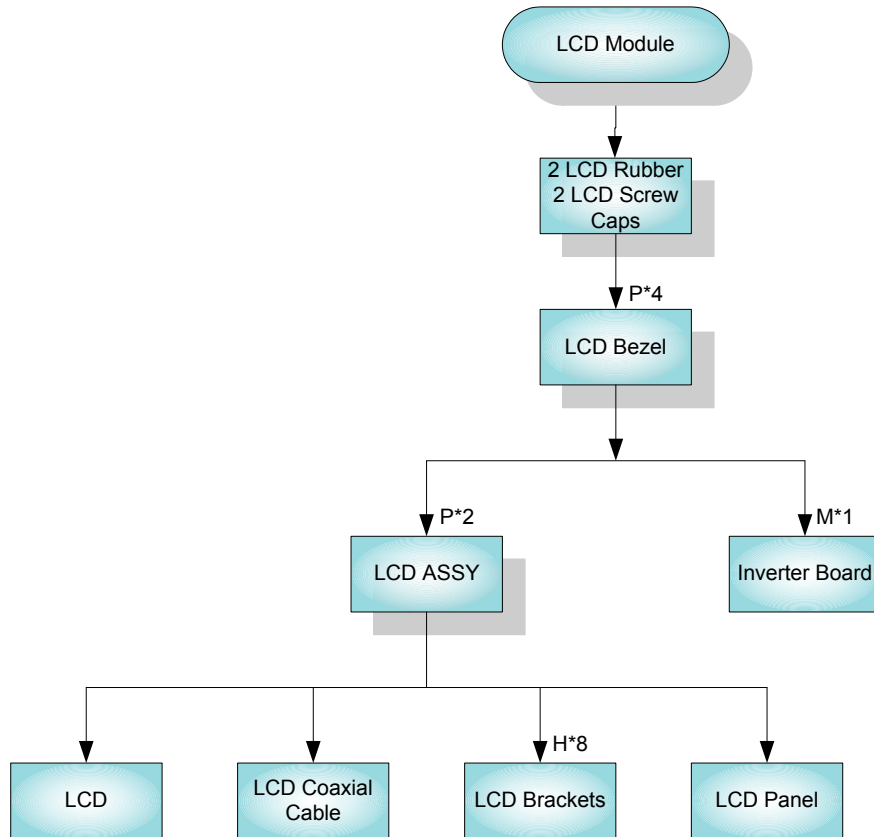
1. Turn off the power to the system and all peripherals.
2. Unplug the AC adapter and all power and signal cables from the system.
3. Remove the battery pack.

NOTE: TravelMate 290 series product uses mylar or tape to fasten the FFC/FPC/connectors/cable, you may need to tear the tape or mylar before you disconnect different FFC/FPC/connectors.

Disassembly Procedure Flowchart

The flowchart on the succeeding page gives you a graphic representation on the entire disassembly sequence and instructs you on the components that need to be removed during servicing. For example, if you want to remove the system board, you must first remove the keyboard, then disassemble the inside assembly frame in that order.





Screw List

Item	Description
A	SCREW BTP M1,7 x 3.5ZS
B	SCREW BTP M2 x 4 ZS
C	SCREW D-SUB NUT
D	SCREW M1.7 x 2.5ZS
E	SCREW M2 x 6 (B) & NI
F	SCREW M2 x 10 (B)
G	SCREW M2 x 2.3 (NL)
H	SCREW M2 x 3 (NL)
I	SCREW M2 x 4 (B)
J	SCREW M2 x 6 (NL)
K	SCREW M2.5 x 1.1 (NL)
L	SCREW M2.5 x 15 (NL)
M	SCREW M2.5 x 3 (NL)
N	SCREW M2.5 x 3 (NL) -up
O	SCREW M2.5 x 4 (NL)
P	SCREW M2.5 x 6 (NL)
Q	SCREW M3 x 4 (NL)

Removing the Battery Pack

1. Slide the battery latch.
2. Then remove the battery.



Removing ODD Module, Memory and HDD Module

Removing the ODD Module

1. Slide the optical drive latch.
2. Then remove the optical drive.



Removing the Memory

1. Unscrew the two screws that secure the DIMM cover.
2. Remove the DIMM cover.
3. Pop out the memory then remove it.



Removing the HDD Module

1. Remove the screw that secures HDD module.
2. Take off the HDD module from the main unit.



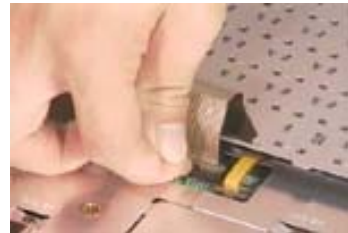
Removing the Keyboard/LCD Module

Removing the Keyboard

1. Use a plastic flat head screw driver or any plastic tool to detach the middle cover carefully.
2. Then remove the middle cover from the main unit.



3. Remove the two screws holding the keyboard.
4. Turn the keyboard over as the picture shows.
5. Disconnect the keyboard cable then remove the keyboard.



Removing the LCD module

1. Remove the middle cover. See step 1 and step 2 on “Removing the Keyboard” section.
2. Remove one screw as the picture shows.
3. Then disconnect the LCD coaxial cable.



4. Remove the six screws on the rear and the bottom panel; three on each side.
5. Then detach the entire LCD module.

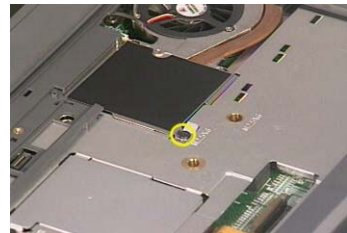
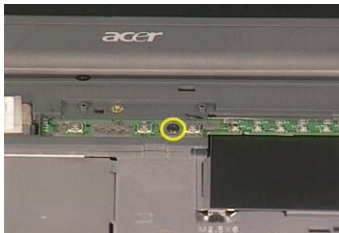


Disassembling the Main Unit

1. See “Removing the Keyboard/LCD Module” on page 49
2. Disconnect the touchpad FPC.
3. Remove the screw that fastens the power button.
4. Then take off the power button.



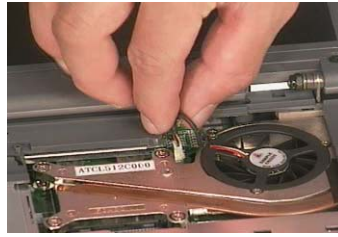
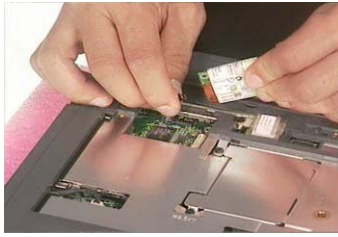
5. Remove the screw holding the launch board.
6. Take off the launch board.
7. Then remove the screw that secures the thermal plate.



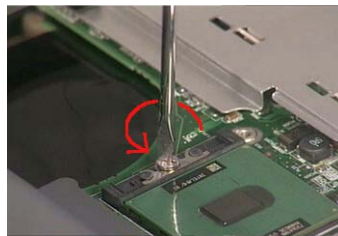
8. Take off the thermal plate.
9. Remove the two screws that fasten the MDC cover plate then remove it.
10. Disconnect the MDC card connector.



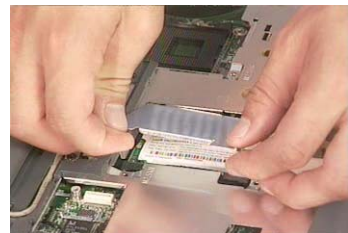
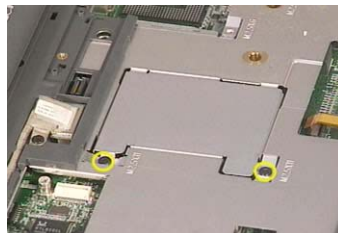
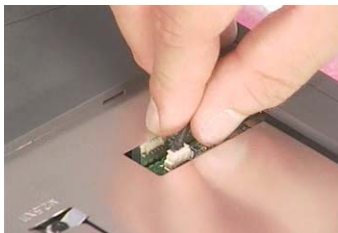
11. Disconnect the modem card cable.
12. Disconnect the fan cable.
13. Remove the four screws according to the order as shown.



14. Remove the thermal module from the main unit.
15. Release the CPU lock.
16. Remove the CPU from the main unit carefully.



17. Disconnect the speaker cable.
18. Remove the two screws holding the mini PCI cover.
19. Then remove the mini PCI cover.



20. Disconnect the wireless LAN antenna.
21. Pop out the wireless LAN card then remove it.

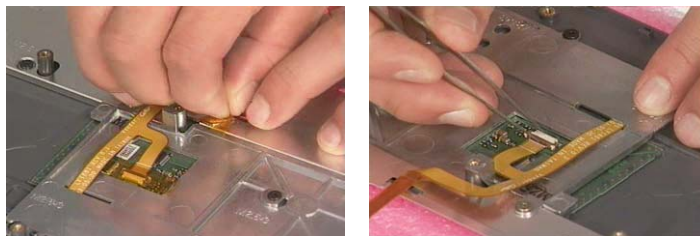


22. To detach the upper case assembly from the lower case assembly, first remove the three screws as shown.

23. Remove the 15 screws on the bottom panel.
24. Then detach the upper case assembly.



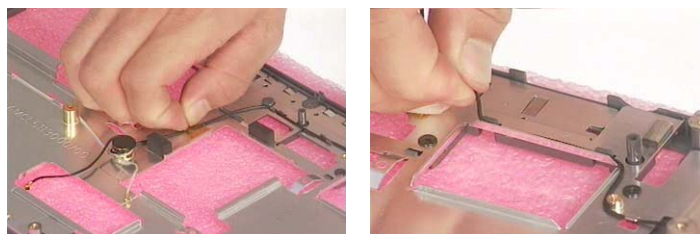
25. Tear off the capton fastening the touchpad FPC.
26. Disconnect the touchpad FPC.



27. Remove the four screws that secure the touchpad support bracket.
28. Then remove the touchpad support bracket.
29. Remove the touchpad.



30. Tear off all capton holding wireless LAN antennae.
31. Take out the wireless antenna from the small fastening hooks.



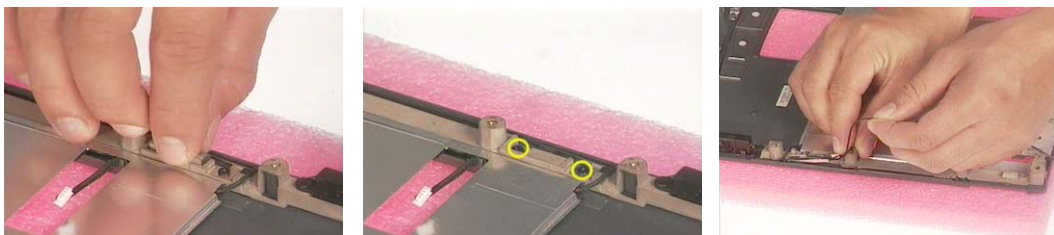
32. Remove the two screws that fasten the wireless antenna.
33. Then take out the wireless antenna.



- 34.** Remove the screw holding the left hinge saddle.
- 35.** Then remove the screw holding the right hinge saddle.



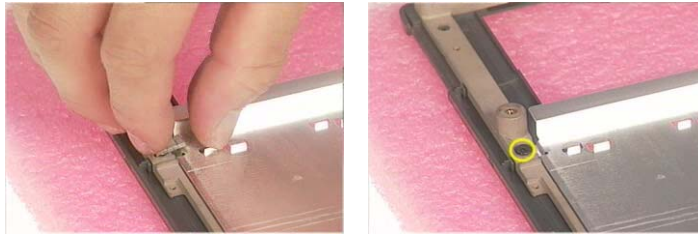
- 36.** Remove the gasget protecting the wireless antenna.
- 37.** Remove the two screws fastening the wireless antenna to the hinge saddle.
- 38.** Then remove the wireless antenna from the upper case.



- 39.** Remove the two screws fastening the left speaker.
- 40.** Place the left speaker as shown.
- 41.** Then take off the left hinge saddle.



- 42.** Remove the gasget.
- 43.** Then remove the screw that secures the hinge saddle.



44. Remove the two screws holding the right speaker.
45. Place the right speaker as shown.
46. Then remove the right hinge saddle.



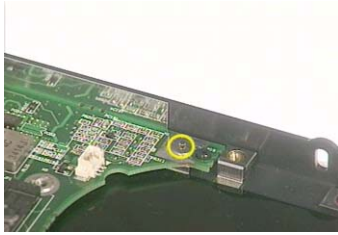
47. Remove the five screws that secure the shielding to the upper case.
48. Tear off the aluminum tape on the right and the left side.
49. Then remove the shielding.



50. Tear off the tape holding the speaker set.
51. Remove the speaker set from the upper case.

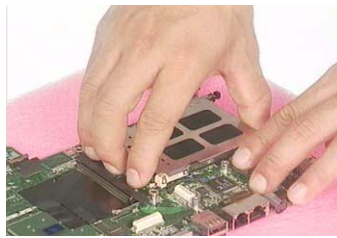
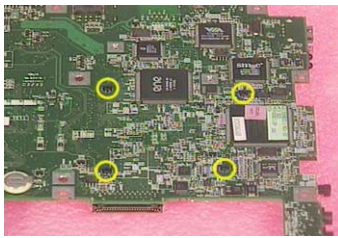


52. Remove the screw that secures the main board to the lower case.
53. Disconnect the touchpad FPC. Please push the lower case outwards as shown.



54. Remove the four screws that fasten the PCMCIA slot.

55. Detach the PCMCIA slot from the main board.



Disassembling the LCD Module

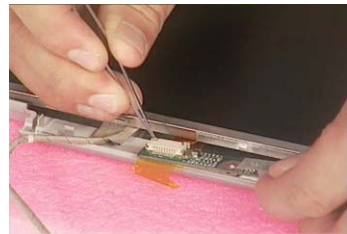
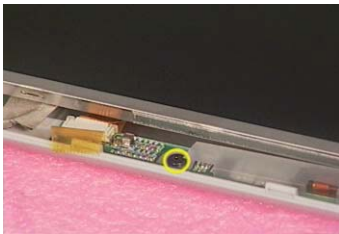
1. Remove the two LCD rubber feet and the two screw caps.
2. Remove the four screws that fasten the LCD bezel.
3. Detach the LCD bezel carefully.



4. Tear off the tape fastening the inverter connector.
5. Tear off the tape fastening the inverter cable.



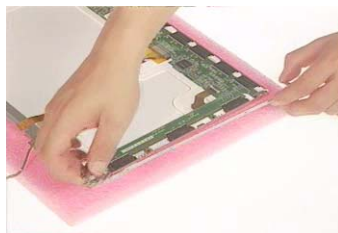
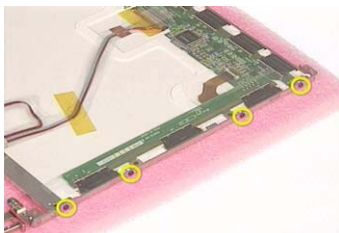
6. Remove the screw holding the LCD inverter board.
7. Disconnect the high voltage cable and the inverter board.
8. Disconnect the inverter board connector.



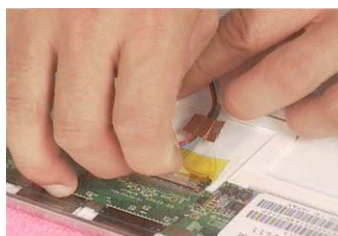
9. Remove the two screws holding the LCD; one on each side.
10. Then remove the LCD from the LCD panel.



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- 11.** Remove the eight screws that fasten the right and the left LCD brackets; four on each side.
 - 12.** Then remove the LCD brackets on both side.



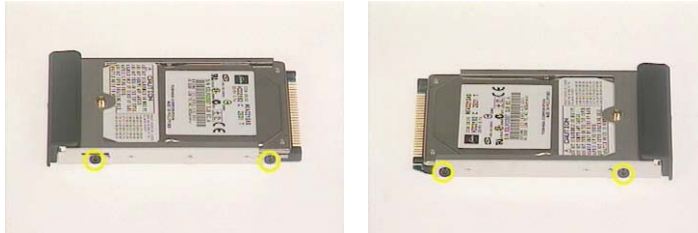
- 13.** Tear off the capton that secure the LCD coaxial cable.
- 14.** Disconnect the LCD coaxial cable.



Disassembling the External Modules

Disassembling the HDD Module

1. Remove the two screws holding the HDD carrier on one side.
2. Then remove another two screws fastening the HDD carrier on the other side.

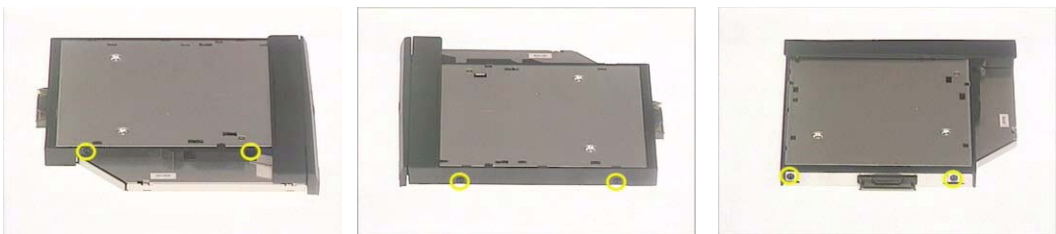


3. Remove the HDD carrier.
4. Remove the two screws holding the HDD cover.
5. Detach the HDD cover.



Disassembling the Optical Disk Drive Module/Combo Drive Module

1. Remove the two screws holding the optical device holder.
2. Remove another two screws that fasten the optical device holder on the other side.
3. Then remove the last two screws that secure the holder.



4. Take the optical disc drive from the optical device holder.
5. Remove the the optical device bracket.
6. Then remove the optical device board.

